IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A polymer comprising a repeat unit represented by the following formula (I), wherein the polymer is end-capped by an organic group:

$$\frac{-\left(-Ar^2-N-Ar^3-CH=CH-Ar^4-CH=CH\right)}{\left(-Ar^4-CH=CH\right)}$$
(I)

wherein, Ar¹ represents a substituted aromatic hydrocarbon group or a non-substituted aromatic hydrocarbon group, Ar² and Ar³ each, independently, represent a divalent aromatic hydrocarbon selected from the group consisting of substituted or non-substituted monocyclic aromatic hydrocarbons, substituted or non-substituted non-condensed polycylic aromatic hydrocarbons and substituted or a non-substituted condensed polycylic aromatic hydrocarbons and Ar⁴ represents a bivalent group of benzene, thiophene, biphenyl or anthracene, each of which can optionally have a substituent.

2. (Previously Presented) The polymer according to Claim 1, wherein the repeat unit is represented by the following formula (II):

$$(R^2)_y$$

$$CH=CH-Ar^4-CH=CH$$

$$(II)$$

wherein, Ar¹ represents a substituted aromatic hydrocarbon group or a non-substituted aromatic hydrocarbon group, Ar⁴ represents a bivalent group of benzene, thiophene, biphenyl or anthracene, each of which can optionally have a substituent, R¹ and R² each, independently, represent a halogen atom, a substituted or non-substituted alkyl group, a substituted or non-substituted alkylthio group, and x and y each, independently represent 0 or an integer of from 1 to 4.

3. (Previously Presented) The polymer according to Claim 2, wherein the repeat unit is represented by the following formula (III):

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$$(R^{2})_{y}$$

$$CH=CH-Ar^{4}-CH=CH$$

$$(R^{3})_{z}$$

wherein, Ar⁴ represents a bivalent group of benzene, thiophene, biphenyl or anthracene, each of which can optionally have a substituent, R¹ and R² each, independently, represent a halogen atom, a substituted or non-substituted alkyl group, a substituted or non-substituted alkylthio group, R³ represents a halogen atom, a substituted or non-substituted alkyl group, a substituted or non-substituted alkyl group, a substituted or non-substituted alkylthio group or a substituted or non-substituted alkylthio group or a substituted or non-substituted aryl group, x and y each, independently, represent 0 or an integer of from 1 to 4 and z represents 0 or an integer from 1 to 5.

4. (Previously Presented) The polymer according to Claim 2, wherein the repeat unit is represented by the following formula (IV):

$$(R^2)_y$$

$$CH=CH-Ar^4-CH=CH$$

$$(IV)$$

$$R^6$$

$$(R^4)_v$$

$$(R^5)_w$$

wherein, Ar⁴ represents a bivalent group of benzene, thiophene, biphenyl or anthracene, each of which can optionally have a substituent, R¹, R², R⁴, R⁵, R⁶ and R⁷ each, independently, represent a halogen atom, a substituted or non-substituted alkyl group, a substituted or non-substituted alkoxy group or a substituted or non-substituted alkylthio group, v represents 0 or an integer of from 1 to 3 and w, x and y independently represent 0 or an integer of from 1 to 4.

5. (Previously Presented) The polymer according to Claim 1, wherein the repeat unit is represented by the following formula:

$$(R^{10})_{t} (R^{11})_{u}$$

$$(R^{8})_{r} (R^{9})_{s}$$

$$(R^{8})_{r} (R^{9})_{s}$$

$$(V)$$

wherein, Ar¹ represents a substituted aromatic hydrocarbon group or a non-substituted aromatic hydrocarbon group, Ar⁴ represents a bivalent group of benzene, thiophene, biphenyl or anthracene, each of which can optionally have a substituent, R⁸, R⁹, R¹⁰ and R¹¹ each, independently, represent a halogen atom, a substituted or non-substituted alkyl group, a substituted or non-substituted alkoxy group or a substituted or non-substituted alkylthio group, and r, s, t and u each, independently, represent 0 and an integer of from 1 to 4.

6. (Previously Presented) The polymer according to Claim 5, wherein the repeat unit is represented by the following formula (VI):

$$(R^{10})_{t} \quad (R^{11})_{u}$$

$$(R^{8})_{r} \quad (R^{9})_{s} \quad (R^{12})_{q}$$

$$(R^{10})_{t} \quad (R^{11})_{u}$$

$$(R^{10})_{t} \quad (R^{11})_{u}$$

$$(R^{10})_{t} \quad (R^{11})_{u}$$

wherein, Ar⁴ represents a bivalent group of benzene, thiophene, biphenyl or anthracene, each of which can have a substituent, R⁸, R⁹, R¹⁰, R¹¹ and R¹² each, independently, represent a halogen atom, a substituted or non-substituted alkyl group, a substituted or non-substituted alkoxy group or a substituted or non-substituted alkylthio group, q represents 0 or an integer of from 1 to 5 and r, s, t and u each, independently, represent 0 or an integer of from 1 to 4.

7. (Previously Presented) The polymer according to Claim 1, wherein at least one of Ar¹, Ar², Ar³ and Ar⁴ included in the repeat unit comprises:

at least one substituted or non-substituted alkyl group, substituted or non-substituted alkoxy group or substituted or non-substituted alkylthio group, each of which comprises a straight chain or a branched chain and having 2 to 18 carbon atoms.

8. (Previously Presented) An organic semiconductor material comprising: the polymer according to Claim 1; and a compound represented by the following formula (VII):

$$\begin{array}{c}
Ar' \\
C = C - (CH = CH) \\
R^{13} R^{14}
\end{array}$$
(VII)

wherein, n is 0 or 1, Ar' represents a substituted aryl group or a non-substituted aryl group, R¹³ and R¹⁴ each, independently, represent a hydrogen atom, a substituted or non-substituted alkyl group, or a substituted or non-substituted aryl group, wherein Ar' and R¹³ can optionally combine to form a ring, A represents a 9-anthryl group, a substituted or non-substituted carbazolyl group, a group represented by the following formula (1), or a group represented by the following formula (2):

$$R^{15}$$
 (1) , R^{16} (2)

wherein R¹⁵ and R¹⁶ each, independently, represent a hydrogen atom, an alkyl group, alkoxyl group, a halogen atom or a group represented by the following formula (3):

$$-N_{R^{18}}^{R^{17}}$$
 (3)

wherein, R^{17} and R^{18} each, independently, represent a substituted or non-substituted alkyl group or a substituted or non-substituted aryl group, wherein R^{17} and R^{18} can optionally combine to form a ring.

9. (Previously Presented) An organic thin film transistor comprising: a substrate;

an organic semiconductor layer which comprises the polymer according to Claim 1 and which is located overlying the substrate;

an electrode pair having a source electrode and a drain electrode; and a third electrode.

10. (Previously Presented) The organic thin film transistor comprising: a substrate;

an organic semiconductor layer which comprises the organic semiconductor material of Claim 8 and which is located overlying the substrate;

an electrode pair having a source electrode and a drain electrode; and a third electrode.

11. (Previously Presented) The organic thin film transistor according to Claim 9, wherein at least one of Ar¹, Ar², Ar³ and Ar⁴ included in the repeat unit comprises:

at least one substituted or non-substituted alkyl group, substituted or non-substituted alkoxy group or substituted or non-substituted alkylthio group, each of which comprises a straight chain or a branched chain and having 2 to 18 carbon atoms.

- 12. (Previously Presented) The organic thin film transistor according to Claim 9, further comprising an insulation layer between the electrode pair and the third electrode.
 - 13. (Previously Presented) The organic thin film transistor according to Claim 12, wherein the insulation layer has a surface energy of from 25 to 40 mN/m.
- 14. (Previously Presented) The organic thin film transistor according to Claim 9, wherein the organic semiconductor layer has a surface having a surface roughness not greater than 1 nm in PV value.
- 15. (Previously Presented) A method of manufacturing an organic thin film transistor, comprising:

applying a solution comprising a solvent and the polymer according to Claim 1 on the substrate; and

drying the solvent of the applied solution to form an organic layer on the substrate.

16. (Previously Presented) The method according to Claim 15, wherein the solution further comprises a compound having the following formula (VII):

$$\begin{array}{ccc}
Ar' \\
C = C - \left(CH = CH\right)_{n} & (VII)
\end{array}$$

wherein, n is 0 or 1, Ar' represents a substituted aryl group or a non-substituted aryl group, R¹³ and R¹⁴ each, independently, represent a hydrogen atom, a substituted or non-substituted alkyl group, or a substituted or non-substituted aryl group, wherein Ar' and R¹³ can optionally combine to form a ring, A represents a 9-anthryl group, a substituted or non-substituted carbazolyl group, a group represented by the following formula (1), or a group represented by the following formula (2):

$$R^{15}$$
 (1) , R^{16} (2)

wherein R¹⁵ and R¹⁶ each, independently, represent a hydrogen atom, an alkyl group, alkoxyl group, a halogen atom or a group represented by the following formula (3):

$$-N_{R^{18}}^{R^{17}}$$
 (3)

wherein, R^{17} and R^{18} each, independently, represent a substituted or non-substituted alkyl group or a substituted or non-substituted aryl group, and wherein R^{17} and R^{18} can optionally combine to form a ring.

- 17. (Previously Presented) The method according to Claim 15, further comprising forming an insulation layer overlying the substrate, wherein the solution is applied on a surface of the insulation layer, and wherein the surface of the insulation layer has a surface energy of from 25 to 40 mN/m.
- 18. (Previously Presented) The method according to Claim 17, further comprising:

subjecting the surface of the insulation layer to a silane coupling treatment before said solution applying step.

- 19. (Previously Presented) The method according to Claim 15, wherein the organic semiconductor layer has a surface having a surface roughness not greater than 1 nm in PV value.
- 20. (Previously Presented) The method according to Claim 15, wherein the organic semiconductor layer is applied by a cup spin method.

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21. (Previously Presented) The method according to Claim 15, wherein the solvent comprises:

tetrahydrofuran serving as a main component; and at least one element selected from the group consisting of toluene, xylene, dioxane, chloroform and dichloromethane.

22. (Previously Presented) The method according to Claim 15, wherein the solvent is dried at a temperature not higher than 150 °C.